



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

mate pen picture, to what we know of the character of the great Empress Dowager, Tse-Hsi.

Mr. J. O. P. Bland is at his worst in discussing "The Opium Abolition Question." Students of contemporary Chinese politics are familiar with Mr. Bland's chronic pessimism. It is unfortunate that a writer who does so well by certain subjects should also produce so much that evidences the cynical viewpoint and careless handling. The superficiality of certain of his contentions with regard to the subject in hand is exposed by some of the comments of other participants in the conference (see p. 210, n.; and p. 269). His adoption of Chekiang Province as a typical example of Chinese insincerity is decidedly damaging to his thesis, as the real history of opium suppression in that province shows. Chekiang was then almost, and is now entirely, free from opium production. The view that opium-smoking is a natural, appropriate, and ineradicable habit among the Chinese is, of course, simply a matter of personal opinion. If Mr. Bland were more critical in his use of materials and less given to prejudices, the student and the statesman would be more inclined than now to accept his conclusions as authoritative.

The value of these collections of Clark University Addresses would be increased if the editor would prepare or have prepared to accompany each group a general summary or critical analysis of the material presented in the addresses which it includes. The indices might, too, be made more complete. Each of these volumes contains a wealth of excellent material, and it would be a great advantage to readers and students to have it made even more readily accessible.

STANLEY K. HORNBECK

UNIVERSITY OF WISCONSIN

The Repayment of Local and Other Loans. Sinking Funds. By EDWARD HARTLEY TURNER. New York: The Ronald Press Co., 1913. 8vo, pp. xxvii+536. \$6.00.

The author, who was the British accounting expert for the National Civic Federation in the investigation, made some years ago, regarding the municipal and private ownership of public utilities, has produced a most convenient work for those having to do with the details of the mathematical calculations concerning sinking funds. The first section of the book, about one hundred pages, is devoted to the simple mathematical principles underlying all problems involving the compounding

of interest. These are reduced to what the author calls standard calculation forms. In most of these he shows how to solve the problems by three different methods: by the algebraic formulae, by standard tables of compound interest, and by Thoman's tables. It being necessary, in working out the solution by each of these methods, to use tables of logarithms, the author duly explains how such tables are manipulated.

The second section discusses the three recognized methods of repaying public debts: by instalments, by an annuity, and by a sinking fund. This most clearly shows how far these three methods resemble one another, and in just what respects they differ. The following four sections treat more specifically of the sinking fund, and deal respectively with problems having to do with the annual instalment, the annual increment, the rate of borrowing, and the life of the asset. As illustrating the kind of problems treated there may be mentioned the following: the correction necessary when there is found to be a deficit in the sinking fund; the proper adjustment of a surplus; and the modifications necessary where the money borrowed is received in several instalments. In these sections, too, the principles are explained in clear fashion, easily to be understood even by those inept in mathematics.

The last two sections have to do with the equation of the period of repayment of loans payable at various dates which are required to be redeemed on one uniform date, and the adjustments of sinking funds thus made necessary. The problems here treated are, says the author, the most difficult of any relating to sinking funds, but they concern transactions unfamiliar to American finance, and hence are of little practical moment in this country.

The work is to be highly commended as a convenient and relatively self-sufficient handbook for the use of officials calculating sinking-fund requirements. It is of especial value in calling attention to the difficulties which arise in the process of accumulating a sinking fund, and in showing just what changes must be made in annual charges in order to correct past, and to prevent future, inaccuracies. It is strong, too, in the emphasis on the question of equity as between successive bodies of taxpayers.

To the economist, however, the work is disappointing, in that it is limited too closely to the purely mathematical considerations. One would expect, from the title, some more satisfying discussion of the policy of sinking funds, some statistical treatment of the results in the practical administration of such funds. Thus the desirability of investing a sink-

ing fund in the issue of bonds which are to be paid by the fund is not discussed; it seems to be assumed that such a practice, being in England legally permissible, is virtually equivalent to making outside investments. But, in some circumstances it might make considerable difference to the holders of outstanding bonds whether one or the other policy had been followed. Thus, assuming a concern with assets worth \$200,000 and a debt of \$100,000, the bondholders have an initial margin of 100 per cent. If the original assets remain unimpaired, the accumulation of a sinking fund of \$50,000 would, if the fund were invested in outside securities, give a margin to the bondholders of 150 per cent; but if the sinking fund were invested in the bonds themselves the margin to the holders of outstanding bonds would be increased to 300 per cent. In this case, then, outstanding creditors would be benefited by the policy of investing in the company's own bonds, a distinction not always observed by those writing on corporation finance. But, on the contrary, assuming that the original assets had become of no value, the investment of the sinking fund in outside securities would protect all bondholders to the extent of 50 per cent, while an investment in the bonds of the company would leave the then bondholders with no resources to protect their holdings. It is not, therefore, a matter of indifference which policy is followed, and a thoroughgoing treatment of such matters would be highly valuable.

On the vexed matter of the relative desirability of paying off bonds by instalments and the accumulation of a sinking fund, the author is again unsatisfactory. He states that "the accumulating sinking-fund method is by far the best." But the argument leading to this statement is brief and by no means conclusive. He seems to base it on two features of the sinking fund—that it bears equally upon each year, and that "it is at once more convenient and more equitable" to the investor. But surely the question of equity to the investor does not enter into the problem. Each bond in a serial issue presumably represents an equitable contract between lender and borrower. The real point at issue is whether the inconvenience of a serial issue results in such an increase in the net rate of interest paid by the borrower as to make it so expensive as to more than offset possible losses through malversation or unwise investment of the sinking fund. This subject is worthy of serious treatment, but is jauntily waived by the author.

It is, however, perhaps ungenerous to criticize an excellent work because it is not something else than it professes to be. The author

has prepared a useful and much-needed handbook, showing the mathematical principles which cannot be escaped in dealing with a sinking fund. For that he deserves the gratitude of all interested in municipal finance.

HENRY RAND HATFIELD

UNIVERSITY OF CALIFORNIA

Maritime Enterprise, 1485-1558. By JAMES A. WILLIAMSON.
Oxford: Clarendon Press, 1913. 8vo, pp. 416. \$4.75 net.

The subject of this book, which had better have been called *English Maritime Enterprise*, embraces both English discovery and English trade overseas during the period from the accession of Henry VII to the death of Mary. Mr. Williamson, though he has mingled these matters in his arrangement, has divided his attention about equally between them. In discussing English discovery he begins naturally with the Cabot voyages, to which he devotes rather more space than the subject would seem to merit. There is no particular reason why the evidence for these voyages should have been set forth again in full. It has been printed many times already, last of all by Mr. Biggar in his excellent collection of sources on the *Precursors of Jacques Cartier*. The account of John Cabot's two voyages adds little or nothing to what Harisse has already written on the subject. Following Winship, Mr. Williamson argues in favor of a third voyage under Sebastian Cabot, but the evidence for this is too meager to be very convincing. The chapters which deal with the further voyages and projects of discovery and colonization under Henry VII and Henry VIII are distinctly good. Mr. Williamson has unearthed some new facts about Thomas Spert which dispose pretty conclusively of Richard Eden's story of a projected voyage to the Northwest in 1516 or, at any rate, of Spert's part in it. On Thorne's scheme and Rut's and Hore's and Hawkins' voyages the book follows well-beaten paths, though it makes some necessary corrections in the account of the Thorne family as printed in the *Dictionary of National Biography* and contributes some interesting details upon the later life of the elder Hawkins.

A separate chapter, devoted to the African voyages under Edward and Mary, deals with the English trading ventures of that period, both to the Atlantic coast of Barbary and to the Guinea coast. The narratives of the voyages themselves are based almost entirely upon Hakluyt's accounts. The most interesting and the newest part of the chapter deals with the efforts on the part of Philip II of Spain to prevent these